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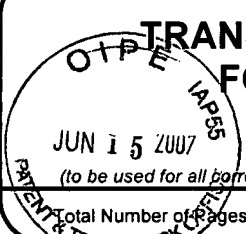
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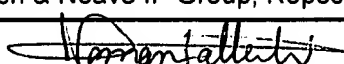
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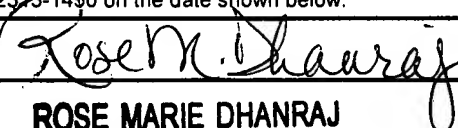
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|  TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 09/821,005 |
| | Filing Date | March 29, 2001 |
| | First Named Inventor | Michael D. Ellis |
| | Art Unit | 2623 |
| | Examiner Name | J. E. Shepard |
| Total Number of Pages in This Submission | Attorney Docket Number | UV-189 |

| ENCLOSURES (Check all that apply) | | |
|--|--|---|
| <input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Claims Appendix A; Evidence Appendix B (copy of Final Office Action dated 11/27/06); Evidence Appendix C (copy of Inoue U.S. Patent No. 6,185,360); and Return Receipt Postcard. |
| Remarks The Director is hereby authorized to charge any fee(s) that may be due under 37 C.F.R. 1.16 or 1.17 to Deposit Account Number 06-1075 (Order No. 003597-0189). | | |

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|--|---|----------|-------------------------------|
| Firm Name | Fish & Neave IP Group, Ropes & Gray LLP | | |
| Signature |  | | |
| Printed name | Hassan Albakri | | |
| Date | June 15, 2007 | Reg. No. | Limited Recognition No. L0013 |

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant : Michael D. Ellis

Application No. : 09/821,005 Confirmation No. : 8533

Filed : March 29, 2001

For : SYSTEMS AND METHODS FOR REDUCING CUT-
OFFS IN PROGRAM RECORDING

Group Art Unit : 2623

Examiner : Justin E. Shepard 06/10/2007 EAREGAYI 02000047 061075 09621005

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Alexandria, Virginia 22313-1450

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Sir:

Appellant is filing this Appeal Brief in support of an appeal from the final rejection of claims 1, 2, 5-7, 10-17, 24-30, 33-35, 38-45, and 52-58 in the Office Action dated November 27, 2006. A notice of Appeal for this case was filed on February 15, 2007.

Appellants hereby petition for a two-month extension of time under 37 C.F.R. § 1.136(a) for filing this Appeal Brief. With the extension, this Appeal Brief is due on or before June 15, 2007.

The Director is hereby authorized to charge \$950.00 to Deposit Account No. 06-1075 (Order No. 003597-0189) in payment of the filing fee required under 37 C.F.R. § 41.20(b)(2) and the extension fee required under 37 C.F.R. § 1.17(a)(2). The Director is

also hereby authorized to charge any additional fees that may be due in connection with this Appeal Brief, or credit any overpayment of the same, to Deposit Account No. 06-1075 (Order No. 003597-0189). A duplicate Form PTO/SB/21 Transmittal Letter is enclosed herewith for that purpose.

Introduction

In the final Office Action dated November 27, 2006, the Examiner rejected claims 1, 2, 5-7, 10-17, 24-26, 29, 30, 33-35, 38-45, 52-54, 57, and 58 under 35 U.S.C. § 102(e) as being anticipated by Inoue et al. U.S. Patent No. 6,185,360 (hereinafter "Inoue"). In addition, the Examiner rejected claims 27, 28, 55, and 56 under 35 U.S.C. § 103(a) as being unpatentable over Inoue.

In view of the arguments and authorities set forth below, the Board should find these rejections in error and should reverse the Examiner.

Appendices

This Brief has the following appendices:

Claims Appendix

Appendix A: Copy of claims 1, 2, 5-7, 10-17, 24-30, 33-35, 38-45, and 52-58 involved in this appeal;

Evidence Appendices

Appendix B: Copy of the final Office Action dated November 27, 2006; and
Appendix C: Copy of Inoue, et al. U.S. Patent No. 6,185,360.

Related Proceedings Appendix

None.

(i). Real Party in Interest

Appellant respectfully advises the Board that the real party in interest in the above-identified patent application is United Video Properties, Inc., a corporation organized and existing under the laws of the State of Delaware, and having an office and place of business at 6922 Hollywood Boulevard, Los Angeles, CA 90028, which is the assignee of this application.

(ii). Related Appeals and Interferences

Appellant respectfully advises the Board that there are no other appeals or interferences known to appellant, his legal representative, or his assignee that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(iii). Status of Claims

Claims 1, 2, 5-7, 10-17, 24-30, 33-35, 38-45, and 52-58 are rejected in this application and are on appeal.

(iv). Status of Amendments

Appellant has not submitted any amendment pursuant to 37 C.F.R. § 1.116 or in reply to the November 27, 2006 final Office Action, from which this appeal is being sought.

(v). Summary of Claimed Subject Matter

Appellant's claims are directed towards systems and methods for reducing cut-offs when programs are

recorded. More specifically, appellant's independent claims 1 and 29 specify receiving at the user equipment a user selection of a program to record. The user equipment predicts a time change associated with the selected program based on time changes for previous programs related to the program. The user equipment records the program to compensate for a time change based on the predicted time change.

Support in the specification for claims 1 and 29 is found at least in the locations indicated in the following table:

| Claim 1 | The Specification |
|--|---|
| A method for use in a recording system for reducing cut-offs when programs are recorded, the method comprising: | See, e.g., paragraph 9. |
| receiving at the user equipment a user selection of a program to record; | See, e.g., paragraph 80 and FIG. 13. |
| predicting by the user equipment a time change associated with the program, wherein the predicted time change is based on time changes for previous programs related to the program; and | See, e.g., paragraphs 80 and 81 and FIGS. 13 and 14a. |
| recording by the user equipment the program to compensate for a time change based on the predicted time change. | See, e.g., paragraphs 82-84 and FIGS. 14b and 14c. |
| Claim 29 | The Specification |
| User recording equipment that reduces cut-offs when programs are recorded, the user recording equipment comprising: | See, e.g., paragraphs 46 and 47. |

| | |
|---|---|
| control circuitry that is configured to: receive selection of a program to record; and | See, e.g., paragraph 63. |
| predict a time change associated with the program, wherein the predicted time change is based on time changes for previous programs related to the program; and | See, e.g., paragraphs 70 and 81. |
| a media recording device that is responsive to the control circuitry and that is configured to record the program to compensate for a time change based on the predicted time change. | See, e.g., paragraphs 72-74, 77 and 78. |

Appellant's dependent claims 27 and 55 are directed towards systems and methods in which a recording time of the scheduled program or an adjacent program is trimmed based on a confidence level in time change information for the scheduled program and the adjacent program. Support in the specification for claims 27 and 55 is found at least in the locations indicated in the following table:

| Claim 27 | The Specification |
|--|----------------------------------|
| The method of claim 26 wherein trimming the recording time comprises trimming based on a confidence level in time change information for the scheduled program and the adjacent program. | See, e.g., paragraphs 72 and 84. |

| Claim 55 | The Specification |
|---|----------------------------------|
| The user recording equipment of claim 54 wherein the control circuitry is configured to trim the recording based on a confidence level in time change information for the scheduled program and the adjacent program. | See, e.g., paragraphs 72 and 84. |

Appellant's dependent claims 28 and 56 are directed towards systems and methods in which a time changed recording time of the scheduled program is trimmed when time change information for the scheduled program has a lower confidence level than the confidence level of the adjacent program. Support in the specification for claims 28 and 56 is found at least in the locations indicated in the following table:

| Claim 28 | The Specification |
|---|--------------------------|
| The method of claim 27 wherein trimming comprises trimming a time changed recording time of the scheduled program when time change information for the scheduled program has a lower confidence level than the adjacent program. | See, e.g., paragraph 84. |
| Claim 56 | The Specification |
| The user recording equipment of claim 55 wherein the control circuitry is configured to trim a time change recording time of the scheduled program when time change information for the scheduled program has a lower confidence level than the adjacent program. | See, e.g., paragraph 84. |

(vi). Grounds of Rejection to be Reviewed on Appeal

The following grounds of rejection are to be reviewed on this appeal:

Whether claims 1, 2, 5-7, 10-17, 24-26, 29, 30, 33-35, 38-45, 52-54, 57, and 58 are anticipated under 35 U.S.C. § 102(e) by Inoue.

Whether dependent claims 27, 28, 55, and 56 are unpatentable under 35 U.S.C. § 103(a) over Inoue.

(vii). Argument

Grouping of Claims

For the purpose of this appeal, appellant divides the rejected claims in three separate groups as follows:

1. Claims 1, 2, 5-7, 10-17, 24-26, 29, 30, 33-35, 38-45, 52-54, 57, and 58;
2. Claims 27 and 55; and
3. Claims 28 and 56.

Each of the claims in a particular group was subject to the same rejection in the Office Action.

In accordance with the requirements of 37 C.F.R. §1.192(c)(7) for consideration of the separate patentability of a plurality of claims subject to the same rejection, appellant submits that each of these Groups of claims does not stand or fall with any other Group of claims, and appellant provides argument below why each of these Groups of claims is separately patentable.

Group 1: Claims 1, 2, 5-7, 10-17, 24-26, 29, 30, 33-35, 38-45, 52-54, 57, and 58

In the final Office Action dated November 27, 2006 (hereinafter "Office Action"), the Examiner rejected independent claims 1 and 29 under 35 U.S.C. § 102(e) as

being anticipated by Inoue. Appellant respectfully traverses this rejection and requests that it be overturned for at least the reasons set forth below.

Appellant's independent claims 1 and 29 are directed to a method and a system for reducing cut-offs when programs are recorded. More specifically, the user equipment predicts a time change associated with a program that is selected for recording. The predicted time change is based on time changes for previous programs related to the program. The user equipment records the program to compensate for a time change based on the predicted time change.

In contrast, Inoue discloses an information receiving system for detecting overlaps in recording time of programs and selecting a program to record based on comparing transmitted service additional information of the programs that are overlapping in recording time. For instance, Inoue recites, in column 8, line 32 through column 9, line 36, sending from a transmitting side "service additional information" about a baseball game that includes "the change information of the broadcasting time that the broadcasting time of the baseball game is extended by 20 minutes." This information is then used to judge "whether this program overlaps with the recording time of other plural reserved programs." If an overlap is detected, a "comparing and determining means" of the user-side receiving apparatus "determines which program to record, out of plural programs overlapped in the recording time." Such determination may be based on tariff points associated with the programs, which is data included in the service additional information, or based on information other than the change in broadcasting time.

1. The Examiner's Rejection

The Examiner contends that:

Inoue discloses a system that receives updated EPG data to indicate when a program that you're recording is going to be on longer than originally expected. The system will take that information and predict whether or not the extended program will run over onto another program that the user has scheduled the system to record. If the system predicts an overlap, the system will update the timing information of the program to be recorded next. This system is interpreted as meeting the limitations of claim 1.

Office Action, page 2.

2. Appellant's Response to the Rejection

In order to maintain a rejection under 35 U.S.C § 102, a rejected claim must be anticipated by the reference. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Appellant respectfully submits that independent claims 1 and 29 are not anticipated by Inoue at least because Inoue does not set forth the "predicted time change" feature claimed by appellant. Instead, Inoue discloses "service additional information" which includes "change information of the broadcasting time" that is different from the claimed time change at least because appellant's claimed time change is: 1) predicted by the user equipment and not merely received from the transmitting side as in Inoue, and 2) used as a basis for recording a program to compensate for a time change and not

used merely to detect whether there is an overlap for determining which program to record as in Inoue. Therefore, contrary to the Examiner's above contentions, Inoue's disclosure cannot be interpreted to meet appellant's claimed features. The following sets forth appellant's arguments in more detail.

- a. Inoue does not disclose predicting by the user equipment a time change associated with the program to be recorded

Appellant respectfully submits that Inoue fails to show predicting by the user equipment a time change associated with the program to be recorded, as specified in appellant's independent claims 1 and 29. Instead, Inoue refers to an approach for receiving by a user-side receiving apparatus from a transmitting side service additional information which includes "change information of broadcasting time" of a program reserved for recording, as recited in column 8, lines 9 through 11 and lines 40 through 46. This is in stark contrast to appellant's claimed approach of predicting by the user equipment a time change associated with the program to be recorded.

Inoue's service additional information provides only an actual change of broadcasting time of the program reserved for recording. The user-side equipment receives this actual change from a transmitting side. On the other hand, the user equipment in appellant's claims predicts a time change for the program to be recorded. Moreover, such prediction of time change may be made by the user equipment without knowing the actual time change associated with the program. See, e.g., appellant's specification, page 32, paragraph 0081, explaining how a log that is stored in a storage device of the user is used to predict time changes.

Contrary to appellant's claims 1 and 29, no time change is at all predicted by the user equipment of Inoue.

- b. Inoue does not disclose recording a program to compensate for a time change based on the predicted time change

Appellant respectfully submits that Inoue fails to show that the predicted time change is used as a basis for recording a program to compensate for a time change, as specified in appellant's independent claims 1 and 29. As admitted by the Examiner on page 2 of the Office Action, Inoue instead refers to using the service additional information to judge "whether or not the extended program will run over onto another program that the user has scheduled the system to record." Even assuming that the change in broadcasting information in the service additional information of Inoue corresponds to appellant's time change, which appellant submits is not the case for the reasons set forth above, Inoue still fails to disclose using such information as a basis to compensate for a time change while recording.

Instead, Inoue uses criteria other than the change in broadcasting time to determine which program to record. For example, such criteria include "the tariff points of charged program included in the service additional information and the program viewable points held at the information receiving side." Inoue, column 11, lines 51 through 55. In addition to using tariff points as a criterion, Inoue also "compares the data size information of the programs and memory remaining capacity, or compares the viewing trend and program genre, and determines the program to be recorded on the basis of the result." Inoue, column 14, lines 28 through 33. Appellant respectfully

submits that such criteria for recording a program are different from appellant's predicted time change of claims 1 and 29.

3. Conclusion

For at least these reasons, appellant respectfully submits that the Board should reverse the rejection of independent claims 1 and 29 under 35 U.S.C. § 102(e). Appellant respectfully submit that the Board should also reverse the rejection of claims 2, 5-7, 10-17, 24-26, 30, 33-35, 38-45, 52-54, 57, and 58 under 35 U.S.C. 102(e) at least because these claims variously depend from independent claims 1 and 29.

Group 2: Claims 27 and 55

In the Office Action, the Examiner rejected dependent claims 27 and 55 under 35 U.S.C § 103(a) as being unpatentable over Inoue. Appellant respectfully traverses this rejection and requests that it be overturned for at least the reasons set forth below.

Appellant's dependent claims 27 and 55 are directed towards a method and a system in which a recording time of the scheduled program or an adjacent program is trimmed based on a confidence level in time change information for the scheduled program and the adjacent program.

In the Office Action, the Examiner rejected dependent claims 27 and 55 stating that:

Inoue teaches wherein trimming the recording comprises trimming based on a confidence level in user's preferred programming for the scheduled program and the adjacent program (See Fig. 15 Step 42 Col. 17 lines 36-67, Col. 18 1-6 and Col. 19 lines 8-20). Establishing a confidence level

based on user preferred programming is different than establishing a confidence level based on time change information. However, both methods of establishing a confidence level are similar in that both methods rely on previously logged data. Inoue also teaches various types of information including information about program distribution time can be used to decide which program is trimmed (See Col. 1 lines 22-30, Col. 9 lines 1-36, and Col. 11 lines 20-42). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Inoue's method of determining which program is trimmed based on a confidence level in time change information for the scheduled and the adjacent program in order to provide Inoue's method an alternate way of automatically choosing which program to trim (See Col. 2 lines 16-25).

Office Action, pages 7 and 8.

Appellant respectfully disagrees. Contrary to the Examiner's assertion, it would not have been obvious for one of ordinary skill in the art at the time appellant's invention was made to make the proposed modification. Just because Inoue and appellant rely on two types of data that happen to share the broad characteristic of being "previously logged," this does not mean that there is sufficient motivation to modify Inoue's method of relying on one type of data to relying on another type, especially when the two types are completely different. And they are completely different. Namely, one type has to do with viewing trend surveys (Inoue, column 17, lines 36 through 46) or whether the program is on-demand, near on-demand or singly distributed (Inoue, column 11, lines 20 through 26) on the one hand, while the other type has to do with program time changes (claims 27 and 55). There is no reason that would have prompted one of ordinary skill in the art to replace reliance on the types of information

disclosed in Inoue to determine what program to record with program time changes.

Moreover, Inoue actually teaches away from appellant's claimed invention. Inoue discloses an information receiving system "capable of making necessary recording automatically, when the recording time of plural reserved programs is overlapped, by judging from the program information of the service additional information, and selecting and reserving the more preferred program for the user." See Inoue, page 2, lines 16-25. Thus, if Inoue's method is modified to include choosing a program to record based on a confidence level of predicted time change information for multiple reserved programs that are overlapping in recording time, then a user-preferred program may not even be chosen for recording in the overlapping time. This is because even though a program may be preferred by a user, it may not have a high enough confidence level associated with its predicted time change information in comparison to adjacent programs. Therefore, the modification proposed by the Examiner actually changes the principles of operation of Inoue and renders it unsatisfactory and inoperable. Because "the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious," *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

For at least these reasons, appellant respectfully submits that the Board should reverse the rejection of dependent claims 27 and 55 under 35 U.S.C. § 103(a).

Group 3: Claims 28 and 56

In the Office Action, the Examiner rejected dependent claims 28 and 56 under 35 U.S.C § 103(a) as being unpatentable over Inoue. Appellant respectfully traverses this rejection and requests that it be overturned for at least the reasons set forth below.

Appellant's dependent claims 28 and 56 further specify that a time changed recording time of the scheduled program is trimmed when time change information for the scheduled program has a lower confidence level than the confidence level of the adjacent program.

In the Office Action, the Examiner rejected dependent claims 28 and 56 by suggesting that Inoue discloses appellant's above features and pointing to column 9, lines 1 through 22 of Inoue, according to which a "comparing and determining means of the information receiving apparatus" compares "specific information out of the information contained in the service additional information for each program, and determines which program to record, out of plural programs overlapped in the recording time on the basis of a specific criterion." Office Action, page 8. However, it is unclear how such a portion can be interpreted as showing or even suggesting appellant's claimed features.

Inoue merely describes an approach to choose a program to record based on criteria such as program tariff information, data size information, memory remaining capacity, viewing trend and program genre. There is no indication whatsoever that choosing a program to record according to Inoue may be based on a confidence level of

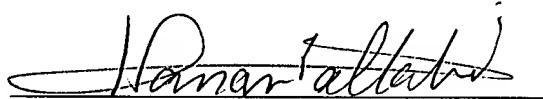
its time change information, let alone trimming a recording time of a program because its time change information has a lower confidence level than an adjacent program. Moreover, the Examiner has not advanced a single reason in the Office Action for modifying Inoue to include appellant's claimed features.

For at least these reasons, appellant respectfully submits that the Board should reverse the rejection of dependent claims 28 and 56 under 35 U.S.C. § 103(a).

Conclusion

For the reasons set forth above, appellant respectfully submits that claims 1, 2, 5-7, 10-17, 24-30, 33-35, 38-45, and 52-58 are in condition for allowance. The Examiner's rejections of these claims should be reversed.

Respectfully submitted,



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(viii). Claims Appendix

CLAIMS APPENDIX A

CLAIMS 1, 2, 5-7, 10-17, 24-30, 33-35, 38-45 AND 52-58 ON
APPEAL

1. A method for use in a recording system for reducing cut-offs when programs are recorded, the method comprising:

receiving at the user equipment a user selection of a program to record;

predicting by the user equipment a time change associated with the program, wherein the predicted time change is based on time changes for previous programs related to the program; and

recording by the user equipment the program to compensate for a time change based on the predicted time change.

2. The method of claim 1 wherein the predicted time change comprises predicted time delay information.

5. The method of claim 2 wherein the predicted time delay information is based on previously logged time changes.

6. The method of claim 1 further comprising displaying a predicted time delay information for the program.

7. The method of claim 1 wherein the predicted time change comprises predicted time extension information.

10. The method of claim 7 wherein the predicted time extension information is based on previously logged time changes.

11. The method of claim 1 further comprising displaying a predicted time extension information for the program.

12. The method of claim 1 further comprising providing a user with an opportunity to select a recording start time.

13. The method of claim 1 further comprising automatically selecting the recording start time.

14. The method of claim 13 further comprising providing a user with an opportunity to select to have automatic selection of the recording start time.

15. The method of claim 1 further comprising providing a user with an opportunity to select a recording end time.

16. The method of claim 1 further comprising automatically selecting the recording end time.

17. The method of claim 16 further comprising providing a user with an opportunity to select to have automatic selection of the recording end time.

24. The method of claim 1 further comprising displaying an icon in a program listing for the program to indicate that the predicted time change is available.

25. The method of claim 1 further comprising displaying an icon in a program listing for the program that indicates that the program is to be recorded.

26. The method of claim 1 further comprising trimming a recording time of the scheduled program or an adjacent program to reduce the cut-off in a program recording.

27. The method of claim 26 wherein trimming the recording time comprises trimming based on a confidence level in time change information for the scheduled program and the adjacent program.

28. The method of claim 27 wherein trimming comprises trimming a time changed recording time of the scheduled program when time change information for the scheduled program has a lower confidence level than the adjacent program.

29. User recording equipment that reduces cut-offs when programs are recorded, the user recording equipment comprising:

control circuitry that is configured to:

receive a user selection of a program to record; and

predict a time change associated with the program, wherein the predicted time change is based on

time changes for previous programs related to the program;
and

a media recording device that is responsive to the control circuitry and that is configured to record the program to compensate for a time change based on the predicted time change.

30. The user recording equipment of claim 29 wherein the predicted time change comprises predicted time delay information.

33. The user recording equipment of claim 30 wherein the predicted time delay information is based on previously logged time changes.

34. The user recording equipment of claim 29 wherein the control circuitry displays a predicted time delay information for the program.

35. The user recording equipment of claim 29 wherein the predicted time change comprises predicted time extension information.

38. The user recording equipment of claim 35 wherein the predicted time extension information is based on previously logged time changes.

39. The user recording equipment of claim 29 wherein the control circuitry displays the predicted time change information for the program.

40. The user recording equipment of claim 29 wherein the control circuitry provides a user with an opportunity to select a recording start time to compensate for the time change.

41. The user recording equipment of claim 29 wherein the control circuitry automatically selects a recording start time to compensate for the time change.

42. The user recording equipment of claim 41 wherein the user recording equipment is configured to provide the user with an opportunity to select to have the control circuitry automatically select a recording start time.

43. The user recording equipment of claim 29 wherein the control circuitry provides the user with an opportunity to select a recording end time to compensate for the time change.

44. The user recording equipment of claim 29 wherein the control circuitry automatically selects a recording end time to compensate for the time change.

45. The user recording equipment of claim 44 wherein the user recording equipment is configured to provide the user with an opportunity to select to have the control circuitry automatically select the recording end time.

52. The user recording equipment of claim 29 wherein the control circuitry displays an icon in a program

listing for the program to indicate that predicted time change information is available.

53. The user recording equipment of claim 29 wherein the control circuitry displays an icon in a program listing for the program that indicates that the program is to be recorded.

54. The user recording equipment of claim 29 wherein the control circuitry is configured to trim the recording time of the scheduled program or an adjacent program to reduce the cut-off in a program recording.

55. The user recording equipment of claim 54 wherein the control circuitry is configured to trim the recording based on a confidence level in time change information for the scheduled program and the adjacent program.

56. The user recording equipment of claim 55 wherein the control circuitry is configured to trim a time change recording time of the scheduled program when time change information for the scheduled program has a lower confidence level than the adjacent program.

57. The method of claim 1 further comprising allowing the user to change the predicted time change.

58. The user recording equipment of claims 29 wherein the control circuitry allows the user to change the predicted time change information.

(ix): Evidence Appendices

EVIDENCE APPENDIX B

COPY OF THE FINAL OFFICE ACTION DATED NOVEMBER 27, 2006



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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/821,005 | 03/29/2001 | Michael D. Ellis | UV/189 | 8533 |

1473 7590 11/27/2006

FISH & NEAVE IP GROUP
ROPES & GRAY LLP
1251 AVENUE OF THE AMERICAS FL C3
NEW YORK, NY 10020-1105

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EXAMINER

SHEPARD, JUSTIN E

ART UNIT PAPER NUMBER

2623

DATE MAILED: 11/27/2006

NOV 30 2006

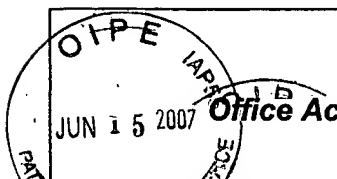
ROPES & GRAY LLP PATENT DEPT.
REFERRED TO MG/XH
NOTED BY _____

Please find below and/or attached an Office communication concerning this application or proceeding.

File No.: UV/189
Action Desc: resp to final O/A
Due Date: sep. 27/2007
By: [signature]

File No.: UV/189
Action Desc: notice of appeal
Due Date: may 27/2007
By: [signature]

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| | | | |
|---|-------------------|--------------|--|
|  | Application No. | Applicant(s) | |
| | 09/821,005 | ELLIS ET AL. | |
| | Examiner | Art Unit | |
| | Justin E. Shepard | 2623 | |

The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2006.
- 2a) ☒ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-7,10-17,24-30,33-35,38-45 and 52-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-7,10-17,24-30,33-35,38-45 and 52-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 10/23/06 have been fully considered but they are not persuasive.

Pages 3-4:

The applicant argues that Inoue does not disclose a method for predicting by the user equipment a time change. What Inoue discloses a system that receives updated EPG data to indicate when a program that you're recording is going to be on longer than originally expected. The system will take that information and predict whether or not the extended program will run over onto another program that the user has scheduled the system to record. If the system predicts an overlap, the system will update the timing information of the program to be recorded next. This system is interpreted as meeting the limitations of claim 1, and therefore the rejection stands.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 5-7, 10-17, 24-26, 29-30, 33-35, 38-45, 52-54, and 57-58 are rejected under 35 U.S.C. 102(e) as being anticipated by Inoue et al. (US 6,185,360).

Regarding claim 1, Inoue teaches a method for use in a recording system for reducing cut-offs when programs are recorded, the method comprising: receiving at the user equipment a user selection of a program to record (See Fig. 11 B Step 4); predicting by the user equipment a time change associated with the program, wherein the predicted time change is based on time changes for previous programs related to the program (See Fig. 11C Step 8 and Col. 8 lines 32-67); and recording by the user equipment the program to compensate for a time change based on the predicted time change (See Fig. 11C and Step 11 and Col. 8 lines 32-67).

Regarding claim 2, Inoue teaches wherein the predicted time change comprises predicted time delay information (See Col. 1 lines 8-15).

Regarding claim 5, Inoue teaches wherein the predicted time delay information is based on previously logged time changes (See Fig. 11C Step 8, 11 and Col. 1 lines 14-30 Col. 8 lines 32-59. Service information about a program change stored in memory before the broadcast of the program is a previously logged time change).

Regarding claim 6, Inoue teaches further comprising displaying a predicted time delay information for the program (See Fig. 11C Step 11 and Col. 8 lines 46-59. Changing EPG is displaying time delay information).

Regarding claim 7, Inoue teaches wherein the predicted time change comprises predicted time extension information (See Fig. 6A-B and Col. 8 lines 32-46).

Regarding claim 10, Inoue teaches wherein the predicted time extension information is based on previously logged time changes (See Fig. 6A-B and Col. 8 lines 32-46 Time extension information stored in memory up until the completion of the baseball game is a previously logged time change).

Regarding claim 11, Inoue teaches further comprising displaying a predicted time extension information for the program (See Fig. 6A-B, Fig. 11C Step 11, and Col. 8 lines 32-46).

Regarding claim 12, Inoue further teaches providing a user with an opportunity to select a recording start time (See Col. 3 lines 28-33 Recording a program directly is selecting a recording start time).

Regarding claim 13, Inoue further teaches automatically selecting the recording start time (See Col. 3 lines 28-33 automatically recording a desired program includes automatically selecting the recording start time).

Regarding claim **14**, Inoue further teaches providing a user with an opportunity to select to have automatic selection of the recording start time (See Col. 3 lines 28-32).

Regarding claim **15**, Inoue further teaches providing a user with an opportunity to select a recording end time (See Col. 3 lines 28-33 Recording a program directly is selecting a recording end time).

Regarding claim **16**, Inoue further teaches automatically selecting the recording end time (See Col. 3 lines 28-33 automatically recording a desired program includes automatically selecting the recording end time).

Regarding claim **17**, Inoue further teaches providing a user with an opportunity to select to have automatic selection of the recording end time (See Col. 3 lines 28-33).

Regarding claim **24**, Inoue further teaches displaying an icon in a program listing for the program to indicate that the predicted time change is available (See Fig. 6B Extending Baseball rectangle).

Regarding claim **25**, Inoue further teaches displaying an icon in a program listing for that program that indicates the program is to be recorded (See Col. 7 lines 60-65).

Regarding claim 26, Inoue further teaches trimming a recording time of the scheduled program or an adjacent program to reduce the cut-off in a program recording (See Fig. 6A-B, Col. 8 lines 20-25, 32-67, and Col. 9 lines 1-35. If overlap is detected a decision is made as to which program is to be recorded. Fig. 6A shows the original recording schedule with the shaded regions showing the programs to be recorded. Fig. 6B shows the modified recording schedule where the recording of Jurassic Land is trimmed to reduce the cut-off in the program recording of Baseball).

Regarding claim 29, Inoue teaches user recording equipment that reduces cut-offs when programs are recorded (See Fig. 1 and Col. 1 lines 60-67 Col. 2 lines 1-60), the user recording equipment comprising: control circuitry that is configured to: receive a user selection of a program to record; and predict a time change associated with the program, (See Fig. 2 Input and output information controller CPU 23a and Col. 1 lines 60-67 Col. 2 lines 1-60) wherein the predicted time change information is based on time changes for previous programs related to the program (Col. 8 lines 32-67); and a media recording device that is responsive to the control circuitry and that is configured to record the program to compensate for a time change based on the predicted time change (See Fig. 1 Second Memory Unit 26 and Col. 1 lines 60-67 Col. 2 lines 1-60).

Regarding claims 30, 33-35, 38-45, 52-54, claims 30, 33-35, 38-45, 52-54 are functions performed by the apparatus of claim 29 related to method claims 2, 5-7, 10-

Art Unit: 2623

17, 24-26, respectively. Therefore, claims 30, 33-35, 38-45, 52-54 are analyzed and rejected according to claims 2, 5-7, 10-17, 24-26.

Regarding claim 57, Inoue teaches allowing the user to change the predicted time change information (See Col. 7 lines 32-48 In Inoue, as interpreted in Response to Arguments above, service additional information is predicted time change. The user can change which service additional information used to construct the EPG. Thus, the user can change predicted time change information).

Regarding claim 58, claim 58 is an apparatus claim 29 related to method claim 57. Therefore, claims 58 is analyzed and rejected according to method claim 57.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27-28 and 55-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al.

Regarding claim 27, Inoue teaches wherein trimming the recording comprises trimming based on a confidence level in user's preferred programming for the scheduled program and the adjacent program (See Fig. 15 Step 42 Col. 17 lines 36-67, Col. 18 1-6


and Col. 19 lines 8-20). Establishing a confidence level based on user preferred programming is different than establishing a confidence level based on time change information. However, both methods of establishing a confidence level are similar in that both methods rely on previously logged data. Inoue also teaches various types of information including information about program distribution time can be used to decide which program is trimmed (See Col. 1 lines 22-30, Col. 9 lines 1-36, and Col. 11 lines 20-42). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Inoue's method of determining which program is trimmed based on a confidence level in time change information for the scheduled and the adjacent program in order to provide Inoue's method an alternate way of automatically choosing which program to trim (See Col. 2 lines 16-25).

Regarding claim 28, Inoue teaches wherein trimming comprises trimming a time changed recording time of the scheduled program when time change information for the scheduled program has a lower confidence level than the adjacent program (See Col. 9 lines 1-22 Either program can be trimmed).

Regarding claims 55-56, claims 55-56 are functions performed by the apparatus of claim 29 related to method claims 27-28, respectively. Therefore, claims 55-56 are analyzed and rejected according to claims 27-28.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JS



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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

EVIDENCE APPENDIX C
COPY OF INOUE U.S. PATENT NO. 6,185,360